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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR   | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|------------------------|---------------------|------------------|
| 10/594,715   | 09/29/2006  | Sureshchandra B. Patel |                     | 2121             |
| 7590   | 02/25/2009  |                        | EXAMINER            |                  |
| Sureshchandra B Patel<br>37 Miller Street<br>Toronto Ontario, M6N2Z6<br>CANADA |             |                        | NGHIEM, MICHAEL P   |                  |
|  |             | ART UNIT               | PAPER NUMBER        | 2863             |
|  |             | MAIL DATE              | DELIVERY MODE       | 02/25/2009 PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                        |                         |  |
|------------------------------|------------------------|-------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b>     |  |
|                              | 10/594,715             | PATEL, SURESHCHANDRA B. |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>         |  |
|                              | MICHAEL P. NGHIEM      | 2863                    |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 28 November 2008.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 10-18 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 10-18 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 21 August 2008 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ .                                    |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____.   | 6) <input type="checkbox"/> Other: _____ .                        |

**DETAILED ACTION**

The Amendment filed on November 28, 2009 has been considered.

***Oath/Declaration***

Applicant is now required to submit a substitute declaration or oath to correct the deficiencies set forth – delete the claim to foreign priority document CA 2479603 (see Notification of Withdrawal of Priority, filed May 30, 2008). The substitute oath or declaration must be filed within the THREE MONTH shortened statutory period set for reply in the “Notice of Allowability” (PTO-37). Extensions of time may NOT be obtained under the provisions of 37 CFR 1.136. Failure to timely file the substitute declaration (or oath) will result in **ABANDONMENT** of the application. The transmittal letter accompanying the declaration (or oath) should indicate the date of the “Notice of Allowance” (PTOL-85) and the application number in the upper right hand corner.

***Specification***

The substitute specification filed June 30, 2008 has not been entered because it does not conform to 37 CFR 1.125(b) because: it is not accompanied by a statement that the substitute specification contains no new matter.

The disclosure is objected to because of the following informalities: The 371 data is missing from the specification.

Appropriate correction is required.

### ***Drawings***

The drawings filed on August 21, 2008 are not acceptable because:

1/ Numbers, letters are small, 37 CFR 1.84(p)(3): See Figs. 1, 2, 3a, 3b.

### ***Claim Objections***

Claim 10 is objected to because of the following informalities:

- claim 10, “effect” (line 2) should be – affect –.
- claim 10, “its” (e.g. lines 18, 38), “their” (line 26) lack antecedent basis.
- claim 10, “and so on” (line 26), should be deleted.
- claim 11, “its” (e.g. line 2) lacks antecedent basis.
- claim 11 has no period at the end.
- claim 17, before “said Parallel Loadflow calculation model” (line 9), should delete “the”.

Appropriate correction is required.

### ***Response to Amendment***

The amendment to the claims filed on November 28, 2008 does not comply with the requirements of 37 CFR 1.121(c) because the status identifier for claim 10 should be changed from “new” to -- currently amended – (see claim 10, filed on September 29, 2006). Furthermore, claim 10 has no markings showing the changes made. Amendments to the claims filed on or after July 30, 2003 must comply with 37 CFR 1.121(c) which states:

(c) *Claims.* Amendments to a claim must be made by rewriting the entire claim with all changes (e.g., additions and deletions) as indicated in this subsection, except when the claim is being canceled. Each amendment document that includes a change to an existing claim, cancellation of an existing claim or addition of a new claim, must include a complete listing of all claims ever presented, including the text of all pending and withdrawn claims, in the application. The claim listing, including the text of the claims, in the amendment document will serve to replace all prior versions of the claims, in the application. In the claim listing, the status of every claim must be indicated after its claim number by using one of the following identifiers in a parenthetical expression: (Original), (Currently amended), (Canceled), (Withdrawn), (Previously presented), (New), and (Not entered).

(1) *Claim listing.* All of the claims presented in a claim listing shall be presented in ascending numerical order. Consecutive claims having the same status of “canceled” or “not entered” may be aggregated into one statement (e.g., Claims 1–5 (canceled)). The claim listing shall commence on a separate sheet of the amendment document and the sheet(s) that contain the text of any part of the claims shall not contain any other part of the amendment.

(2) *When claim text with markings is required.* All claims being currently amended in an amendment paper shall be presented in the claim listing, indicate a status of “currently amended,” and be submitted with markings to indicate the changes that have been made relative to the immediate prior version of the claims. The text of any added subject matter must be shown by underlining the added text. The text of any deleted matter must be shown by strike-through except that double brackets placed before and after the deleted characters may be used to show deletion of five or fewer consecutive characters. The text of any deleted subject matter must be shown by being placed within double brackets if strike-through cannot be easily perceived. Only claims having the status of “currently amended,” or “withdrawn” if also being amended, shall include markings. If a withdrawn claim is currently amended, its status in the claim listing may be identified as “withdrawn—currently amended.”

(3) *When claim text in clean version is required.* The text of all pending claims not being currently amended shall be presented in the claim listing in clean version, i.e., without any markings in the presentation of text. The presentation of a clean version of any claim having the status of "original," "withdrawn" or "previously presented" will constitute an assertion that it has not been changed relative to the immediate prior version, except to omit markings that may have been present in the immediate prior version of the claims of the status of "withdrawn" or "previously presented." Any claim added by amendment must be indicated with the status of "new" and presented in clean version, i.e., without any underlining.

(4) *When claim text shall not be presented; canceling a claim.*

(i) No claim text shall be presented for any claim in the claim listing with the status of "canceled" or "not entered."

(ii) Cancellation of a claim shall be effected by an instruction to cancel a particular claim number. Identifying the status of a claim in the claim listing as "canceled" will constitute an instruction to cancel the claim.

(5) *Reinstatement of previously canceled claim.* A claim which was previously canceled may be reinstated only by adding the claim as a "new" claim with a new claim number.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 10-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 11, "A loadflow calculation as defined in claim 10" is unclear. The subject matter of claim 10 is directed to "a method for forming/defining and solving a model of power network to effect control of voltages and power flows in a power

system". Examiner suggests changing claim 11 to recite on line 1 "A method as defined in claim 10, wherein the loadflow calculation ...".

Claim 12 lacks a transitional phrase. Thus, the metes and bounds of the claim cannot readily be ascertained. MPEP 2111.03.

Claims 10-18, "means plus function" limitations (e.g. means defining, claim 13, line 9) are not in the proper format (means for defining). Please make sure that all means plus functions limitations are corrected.

Claims 12, 13, the terms "simple" and "best" (line 1) are relative terms which render the claims indefinite. The terms are not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claim 13, "said means defining and solving Loadflow calculation model of the power network characterized in claim 10" is unclear. The subject matter of claim 10 is directed to "a method for forming/defining and solving a model of power network to effect control of voltages and power flows in a power system". Examiner suggests changing claim 13 to recite on line 1 "A system for performing a method as defined in claim 10, for controlling generator and transformer voltages ...." and deleting "characterized in claim 10".

Claim 17, “creating and solving said Parallel Loadflow calculation model of the power network as characterized in claim 10” is unclear. The subject matter of claim 10 is directed to “a method for forming/defining and solving a model of power network to effect control of voltages and power flows in a power system”. Examiner suggests changing claim 17 to recite on line 1 “A method using a method as defined in claim 10, for controlling generator and transformer voltages ....” and deleting “characterized in claim 10”.

The remaining claims are also rejected under 35 U.S.C. 112, second paragraph, for being dependent upon a rejected base claim.

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 10-18 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The method is not tied to another statutory class (such as a particular apparatus) or transforms an underlying subject matter (such as an article or material). Thus,

the method is not a patent eligible process under 35 USC 101 and is directed to non-statutory subject matter. See *In re Bilski*, Appeal No. 2007-1130.

To qualify as a 101 statutory process, the claim should positively recite the other statutory class (the thing or product) to which it is tied, for example by identifying the apparatus that accomplishes the method steps or positively recite the subject matter that is being transformed, for example by identifying the material that is being changed to a different state.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 12 is rejected under 35 U.S.C. 102(b) as being anticipated by DeRoo (US 6,182,196).

Regarding claim 12, DeRoo discloses a simple and the best possible parallel computer (Fig. 2; column 4, lines 7-10): a server processor-array processors architecture (Fig. 2), wherein each of the array processors (110, 292, 293) send

communication to and receive communication from only the server processor (202), commonly shared memory locations (clients 110, 292, 293 access memories 100, 131 via memory control engine 202), and each processor's private memory locations (memories of clients 110, 292, 293), but not among themselves (e.g., client 110 does not communicate with client 292).

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Patel (US 2008/0281474) discloses a method of performing loadflow calculations for controlling voltages and power flow in a power network (Abstract, lines 1-2). However, Patel is not made by another and does not disclose/claim a method that requires calculations using equations 30-34 or 35-39 as recited in claim 10 of the instant application.

### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Nghiem whose telephone number is (571) 272-2277. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on (571) 272-2312. The fax

phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Michael P. Nghiem/

Primary Examiner, GAU 2863

February 18, 2009